(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
13 September 2001 (13.09.2001)

PCT

(10) International Publication Number
WO 01/67276 A1

(51) International Patent Classification[7]: G06F 17/00

(21) International Application Number: PCT/KR01/00148

(22) International Filing Date: 2 February 2001 (02.02.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2000/11355 7 March 2000 (07.03.2000) KR

(71) Applicant: **WEB2PHONE CO. LTD.** [KR/KR]; 10th Floor Hyundai Tower Bldg., 143-37 Samsung-dong, Kangnam-gu, Seoul 135-090 (KR).

(72) Inventors: **KWAK, Bong, Yeoul**; #120-705 Hyundai Apt., 928 Dongchoon-dong, Yeonsoo-gu, Incheon-shi 406-130 (KR). **LEE, Yang, Dong**; B-1101 Eunha Apt., Yeoido-dong, Youngdeungpo-gu, Seoul 150-010 (KR). **RNOH, Kwang, Jin**; #102-701 Nonhyun-ShindongAh Apt., 22 Nonhyun-1-dong, Kangnam-gu, Seoul 135-011 (KR).

(74) Agents: **LEE, Hoo Dong** et al.; 7th-11th Floors, Hankook Tire Bldg, 647-15, Yoksam-dong, Kangnam-ku, Seoul 135-080 (KR).

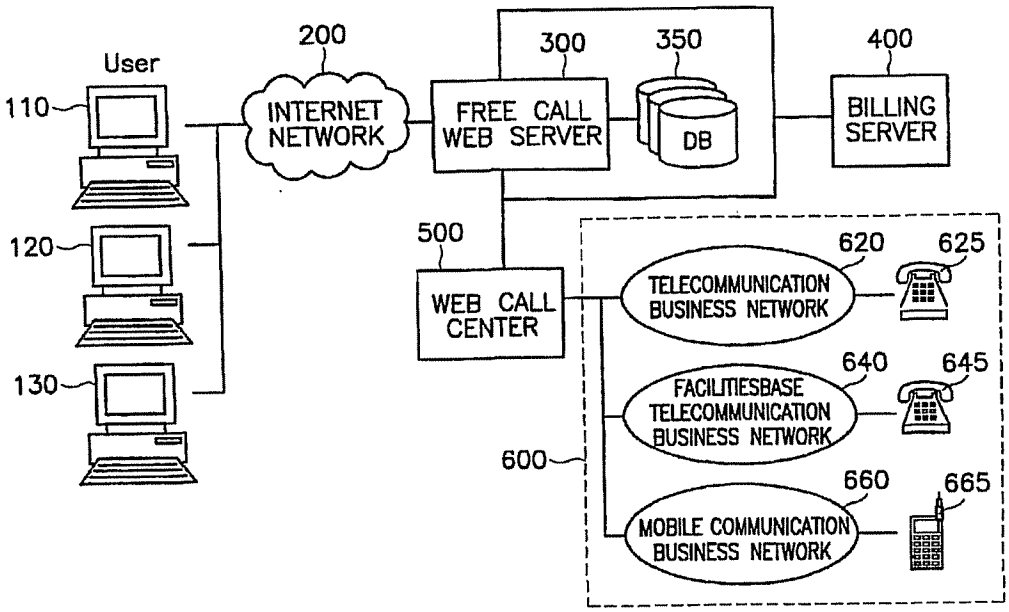
(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SYSTEM AND METHOD FOR PROVIDING FREE CALL SERVICE ON THE INTERNET



(57) Abstract: The present invention discloses a method and a device for providing a free call service on the internet. When the user watches an advertisement on the web, free call coupon points are differentially accumulated according to the advertisement-watching time. The user employs the free call service with the points on the internet, and the points are reduced according to a predetermined telephone charge rate.

WO 01/67276 A1

SYSTEM AND METHOD FOR PROVIDING FREE CALL SERVICE ON THE INTERNET

This application claims priority, under 35 U.S.C. §119, of Application Serial No. 2000-11355 filed on March 7, 2000, in the Republic of Korea [KR].

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to a method for providing a free call service, and in particular to a method for providing a free call service on the internet wherein points are accumulated when a user clicks a specific advertisement on the internet, and the user is granted with free calls according to the accumulated points.

2. Description of the Background Art

A free call service has been provided in various forms through the internet network. For example, both parties can speak to each other over the telephone by connecting to a server, which provides the free call service on the internet network, or connect to the telephone by using a personal computer. A service company providing the free call service through the internet network procures investment expenses

and telephone charges by inviting a banner advertisement on the web site. However, the making profits is not always guaranteed, so an advertiser does not get the benefits by advertisement all the time.

That is, a user may earn a right to use the free call service simply by clicking a banner advertisement on the free call site without spending a set period of time for viewing the banner advertisement. In another case, the free call site may unilaterally decide the time at which the banner advertisement is displayed without regards to the needs of the advertiser and the viewing preference for users, thus rending the advertisement ineffective.

SUMMARY OF THE INVENTION

Accordingly, an object of the present invention is to provide a method for providing a free call service on the internet, wherein free call coupon points are differentially applied according to the advertisement-watching time and step, the user gets the free call service with the points, and the points are taken off after making phone calls according to the predetermined telephone charge rate.

In order to achieve the above-described object of the present invention, there is provided a method for providing

a free call service on the internet, comprising the steps of: registering user who accessed to a free call web server through an internet network as a member of the free call service; providing accumulated free call coupon points to the user who registered at the free call web server if he/she uses information and advertisement on the web; displaying a predetermined advertisement, when the user uses the free call service with the accumulated coupon points; and reducing the accumulated coupon points according to a telephone charge rate when the user employs the free call service, the free call service being ended when the user does not have the accumulated coupon points.

BRIEF DESCRIPTION OF THE DRAWINGS

The present invention will become better understood with reference to the accompanying drawings which are given only by way of illustration and thus are not limitative of the present invention, wherein:

Figure 1 illustrates a structure of a network for a free call service in accordance with the present invention;

Figure 2 is a flowchart showing a method for providing the free call service in accordance with the present invention;

Figures 3 to 5 are detailed flowcharts showing the method for providing the free call service in Figure 2; and

Figures 6a and 6b show examples of an advertisement screen window in the free call service in accordance with the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

A method and device for providing a free call service on the internet in accordance with the present invention will now be described in detail with reference to the accompanying drawings.

Figure 1 illustrates a structure of a network for the free call service in accordance with the present invention. The network structure includes: user computers 110, 120, 130, an internet network 200, a free call web server 300, a free call database 350, a billing server 400, a web call center 500 and a telecommunication business network 600.

The telecommunication business network 600 includes: a telecommunication business network 620 for communicating with an international telephone 625, a facilitiesbase telecommunication business network 640 for communicating with a local and toll telephone 645, and a mobile communication business network 660 for communicating with a

mobile communication terminal 665.

The user computers 110, 120, 130 connect to the free call web server 300 through the internet network 200. The free call web server 300 performs a member registration or searches the previously-registered member information of the user. In addition, when the user clicks a banner advertisement displayed on the web, the free call web server 300 checks a click time, provides the click time to the billing server 400, receives coupon point information according to the click time and step from the billing server 400, and provides the free call coupon point information to the user computer 110, 120, 130. Thereafter, the free call web server 300 transmits telephone number information received from the user computer 110, 120, 130 to the web call center 500, receives coupon point reduction information from the billing server 400 when the user computer 110, 120, 130 accumulating the free call coupon points uses the free call service, and provides the coupon point reduction information to the user computer 110, 120, 130.

The free call database 350 connects to the free call web server 300, and includes personal information of members, free call coupon point information of members, link information of banner advertisements, and banner advertisement information.

The billing server 400 checks the advertisement click time and step of the user, and provides the free call coupon point information corresponding to the click time to the free call web server 300. When the user gets the free call service, the billing server 400 provides the coupon point reduction information according to a predetermined telephone charge rate to the free call web server 300. The web call center 500 calls the other party through the specific telecommunication business network 620 according to the telephone information from the free call web server 300.

Here, the web call center 500 enables the user to log on through a dialer program of a web plugin, and to communicate with another party over a general telephone line through the internet network by providing voice over internet protocol(VOIP) service.

Figure 2 is a flowchart showing the method for providing the free call service in accordance with the present invention.

The user computers 110, 120, 130 connect to the free call web server 300 through the internet network 200 and register at the free call service. The free call web server 300 stores the user information in the free call database 250, and provides the free call coupon points to the user computers 110, 120, 130, respectively. Here, the member

information recorded by the user computers 110, 120, 130 is graded according to its recording amount, and the coupon points are differentially provided. The accumulated coupon point information is stored in the free call database 250(S100,S200).

Thereafter, when the user accumulates the coupon points to get the free call service on the web, the free call web server 300 transmits the accumulated free call coupon points to the user PC 110, 120, 130 through the internet network 200. Here, the user confirms his/her accumulated coupon points, clicks a call operation window on the web, and inputs a telephone number. The telephone information is transmitted to the free call web server 300 through the internet network 200.

The free call web server 300 applies the telephone charge rate by a charge rate database of the free call database 350 according to the telephone number transmitted through the internet network 200, and provides the telephone number information to the web call center 500. The web call center 500 analyzes the telephone information, and connects a phone call through the corresponding telecommunication business network 600(S300,S400).

Here, when the user PC 110 and the other party make a phone call through the web call center 500, the free call

web server 300 provides call start information to the billing server 400. The billing server 400 receives the call start information, reduces the free coupon points according to the predetermined charge rate, and provides the information to the free call web server 300. Here, the free call coupon point reduction information is transmitted through the internet network 200 to the user PC 110 who uses the free call service. Therefore, reduction of the accumulated coupon points according to the reduction information from the free call web server 300 in the free call service is displayed on the screen of the user PC 110(S500).

Here, the free call web server 300 constantly senses the reduction of the free call coupon points of the user receiving the free call service, and transmits a call stop command to the web call center 500 when the accumulated coupon points become zero(0). Accordingly, the free call service is completed(S600).

On the other hand, the user can receive the free call service again by accumulating the free call coupon points provided by the free call web server 300.

Figure 3 is a detailed flowchart showing a registration process of the free call service in Figure 2.

Firstly, the user connects to the free call web server

300 through the internet network 200, writes member information on a main member menu window, and transmits it to the free call web server 300. The free call web server 300 detects the information from the user, and registers it on the free call database 350 if an error is not found(S210, S220, S230).

Upon registration, the free call web server 300 provides some free call coupon points to the user PC 110, 120, 130 through the internet network 200. The accumulated points information is displayed on a screen of the user PC 110, 120, 130.

Figure 4 is a detailed flowchart showing an accumulation process of the free call coupon points in Figure 2.

When the user sets up 'coupon accumulation' on the member main menu window, the free call coupon points are accumulated in various ways according to the click information. That is, when the user registers 'advertisement mail subscription', the free call web server 300 stores information of the corresponding member(S320), and provides the free call coupon according to the subscription registration(S325).

When the user clicks an advertisement banner displayed on the web, the click signal is transmitted to the billing

server 400 through the free call web server 300. Here, the billing server 400 performs a count operation by a counter, and provides the free call coupon points to the user according to the banner advertisement watching time(S330, S335).

The billing server 400 can check the user information and the using time by web contents on the basis of a hypertext transmission protocol.

When the user joins an affiliated company on the web, the member information is transmitted to the free call web server 300. Here, the free call web server 300 searches the member information from the free call database 350, and provides the free call coupon points to the corresponding member according to the member registration(S340, S345).

On the other hand, when the user takes part in a questionnaire survey and an online event on the web(S350), the free call web server 300 searches information and differentially provides points to the user according to the information amount(S355).

In addition, when the user clicks a special link on the free call web, the click time is counted by the free call web server 300. The free call web server 300 receives the billing information according to the counted time, namely the free call coupon points from the billing server

400. Accordingly, the free call web server 300 provides the free call coupon points to the user(S360, S365).

The points are accumulated on a point accumulation window as shown in Figure 6a. Thereafter, the free call coupon points accumulated by the user are displayed.

Figure 5 is a detailed flowchart showing a free call process in Figure 2.

The user sets up a free call operation on the point accumulation window after accumulating the free call coupon points. The free call operation information is transmitted to the free call web server 300 through the internet network 200. Here, the free call web server 300 loads a dialer, and provides the user with an intermediate full screen advertisement through the internet network 200 while the dialer is loaded(S410, S420).

The loading time of the dialer is 5 to 10 seconds. The intermediate full screen advertisement is provided as motion pictures. When the dialer is loaded, the advertisement window is automatically closed by using a flash function.

The intermediate full screen advertisement attracts considerable attention, and thus results in a large amount of advertisement profits. The advertisement may be provided to a specific group of users. That is, the intermediate full screen advertisement may be made according to the age and

interests of the users by referring to the member information.

On the other hand, when the dialer is loaded, as illustrated in Figure 6b, the intermediate full screen advertisement window is closed, and a full screen advertisement and a ticker advertisement are displayed with the dialer(S430). When the user clicks the advertisement, the click information is transmitted to the free call web server 300. According to the information, the free call web server 300 receives the billing information from the billing server 400, and provides the free call coupon points to the user(S450).

At this time, the ticker advertisement changes at 30-second intervals. When the user clicks the ticker advertisement, a corresponding homepage is loaded at the full screen advertisement region. As a result, the user is provided with the free call coupon points according to the advertisement clicking.

On the other hand, when the user inputs a telephone number through the dialer on the free call operation window, the free call web server 300 analyzes the inputted telephone number, determines a telephone charge rate according to a corresponding area, and provides the telephone number information to the web call center 500.

The web call center 500 connects to the telecommunication business network 600 corresponding to the inputted telephone number. When the user inputs an international telephone number, the web call center 500 communicates with the international telephone terminal 625 through the telecommunication business network 620. When the user inputs a local or toll telephone number, the web call center 500 communicates with the local wire terminal 645 through the facilitiesbase telecommunication business network 640. In addition, when the user inputs a mobile phone number, the web call center 500 communicates with the mobile communication terminal 665 through the mobile communication business network 660(S470).

When the user receives the free call service, the free call web server 300 receives the reduction information of the free call coupon points according to the telephone charge rate from the billing server 400, and displays the information on the web of the user. Accordingly, the user can recognize the reduction of the accumulated coupon points during the free call.

The free call web server 300 analyzes the telephone number inputted by the user, receives an advertisement relating to a corresponding country from an advertisement server(not shown) (for example, an US-related advertisement

when the user inputs an US telephone number), and displays it on the free call operation window as the ticker advertisement(S480).

On the other hand, when the user PC 110 sets up the advertisement mail reception registration upon the member registration, the free call web server 300 periodically provides the advertisement mail information to the user PC 110. When the user PC 110 confirms and clicks the advertisement mail transmitted through the internet network 200, the free call web server 300 provides some free call coupon points to the user PC 110. Here, the free call coupon points are graded according to the click time of the user.

The free call web server 300 enables a server administrator to issue the free call coupons according to the advertisement clicking of the user and to adjust the telephone charge rate. Therefore, the administrator can make profits.

As discussed earlier, the present invention embodies the free call service on the internet. The user accumulates the coupon points on the coupon accumulation window. When the user uses the free call service, the accumulated coupon points are reduced, thereby maximizing the advertisement effects.

As the present invention may be embodied in several

forms without departing from the spirit or essential characteristics thereof, it should also be understood that the above-described embodiment is not limited by any of the details of the foregoing description, unless otherwise specified, but rather should be construed broadly within its spirit and scope as defined in the appended claims, and therefore all changes and modifications that fall within the metes and bounds of the claims, or equivalences of such metes and bounds are therefore intended to be embraced by the appended claims.

What is claimed is:

1. A method for providing a free call service on the internet, comprising the steps of:

registering a user who accesses to a free call web server through an internet network as a member of the free call service;

accumulating free call coupon points for the user by allowing the user to use information and advertisement;

providing the accumulated free call coupon points to the user who registered with the free call web server and used the information and advertisement;

displaying a predetermined advertisement, when the user uses the free call service with the accumulated coupon points; and

reducing the accumulated coupon points according to a telephone charge rate when the user employs the free call service, the free call service being ended when the user does not have the accumulated coupon points.

2. The method according to claim 1, wherein the said registration step comprises the steps of:

determining whether the user connecting to the free call web server intends to be a member of the free call

service;

recording information provided by the user if he/she intends to be the member information when the user becomes the member of the free call service;

storing the said information when there is no error, and providing the free call coupon points to the registered member; and

displaying the accumulated free call coupon points to the member.

3. The method according to claim 2, wherein the free call coupon points are graded according to information provided by the member.

4. The method according to claim 1, wherein the free call coupon points are accumulated when the member subscribes to advertisement mail, and additionally accumulated according to the advertisement watching time of the member.

5. The method according to claim 1, wherein the free call coupon points are differentially accumulated according to the advertisement watching time of the member, when he/she clicks an advertisement banner on the web.

6. The method according to claim 1, wherein the free call coupon points are accumulated when the member becomes a member of an affiliate concern.

7. The method according to claim 1, wherein the free call coupon points are differentially accumulated according to the information amount provided by the member, when he/she takes part in a questionnaire survey and an online event.

8. The method according to claim 1, wherein the free call coupon points are differentially accumulated according to a link time, when the member clicks a specific link on a dialer window.

9. The method according to claim 1, wherein the said the free call service comprises the steps of:

loading a dialer when the member sets up a free call operation window, and outputting an intermediate full screen advertisement during the loading time;

displaying an advertisement screen with the dialer on the free call operation window, when the dialer is loaded;

determining whether the member clicks the

advertisement screen;

providing predetermined points to the member, when he/she clicks the advertisement screen; and

performing the free call operation by applying a charge rate of an inputted telephone number, when the member inputs the telephone number through the dialer.

10. The method according to claim 9, wherein the intermediate full screen advertisement is displayed according to the member's preferences in the registration information during the loading time of the dialer.

11. The method according to claim 9, wherein the advertisement screen displayed with the dialer is divided into a full screen main advertisement region and a ticker advertisement region, and the ticker advertisement is changed at 30-second intervals and loaded to the full screen main advertisement region when the user clicks it.

12. The method according to claim 9, wherein the advertisement relating to an area of a telephone number inputted by the user is displayed in the ticker advertisement region.

13. A system for providing a free call service on the internet, comprising:

means for enabling a user to register at the free call service through an internet network;

means for enabling the user who registered at the free call web server to accumulate free call coupon points;

means for enabling the user to use the free call service with the accumulated coupon points; and

means for reducing the accumulated coupon points according to a telephone charge rate and a call time, when the user employs the free call service, the free call service being ended when the user does not have the accumulated coupon points.

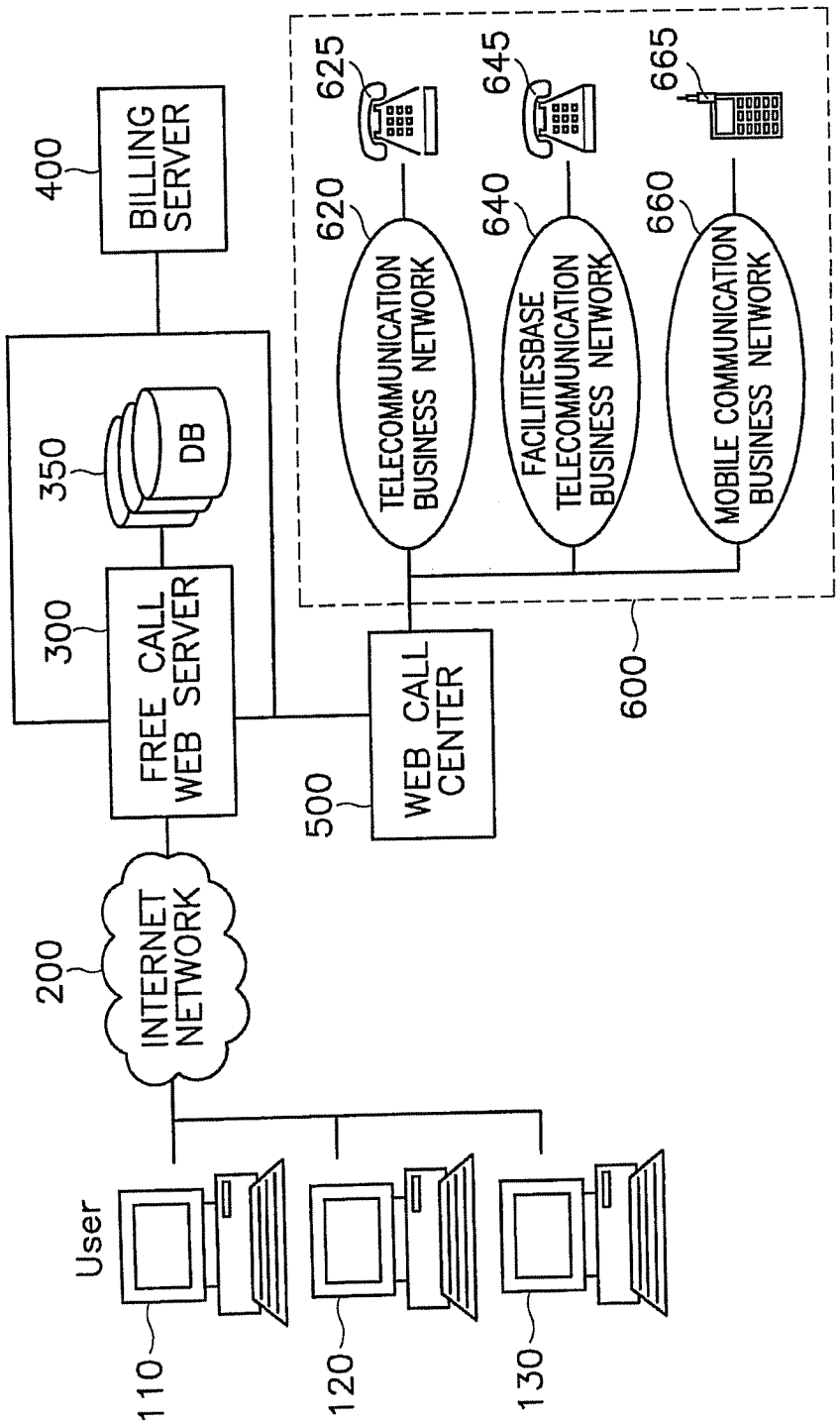

User
110
120
130
200
INTERNET NETWORK
300
FREE CALL WEB SERVER
350
DB
400
BILLING SERVER
500
WEB CALL CENTER
600
620
TELECOMMUNICATION BUSINESS NETWORK
625
640
FACILITIESBASE TELECOMMUNICATION BUSINESS NETWORK
645
660
MOBILE COMMUNICATION BUSINESS NETWORK
665

Fig.1

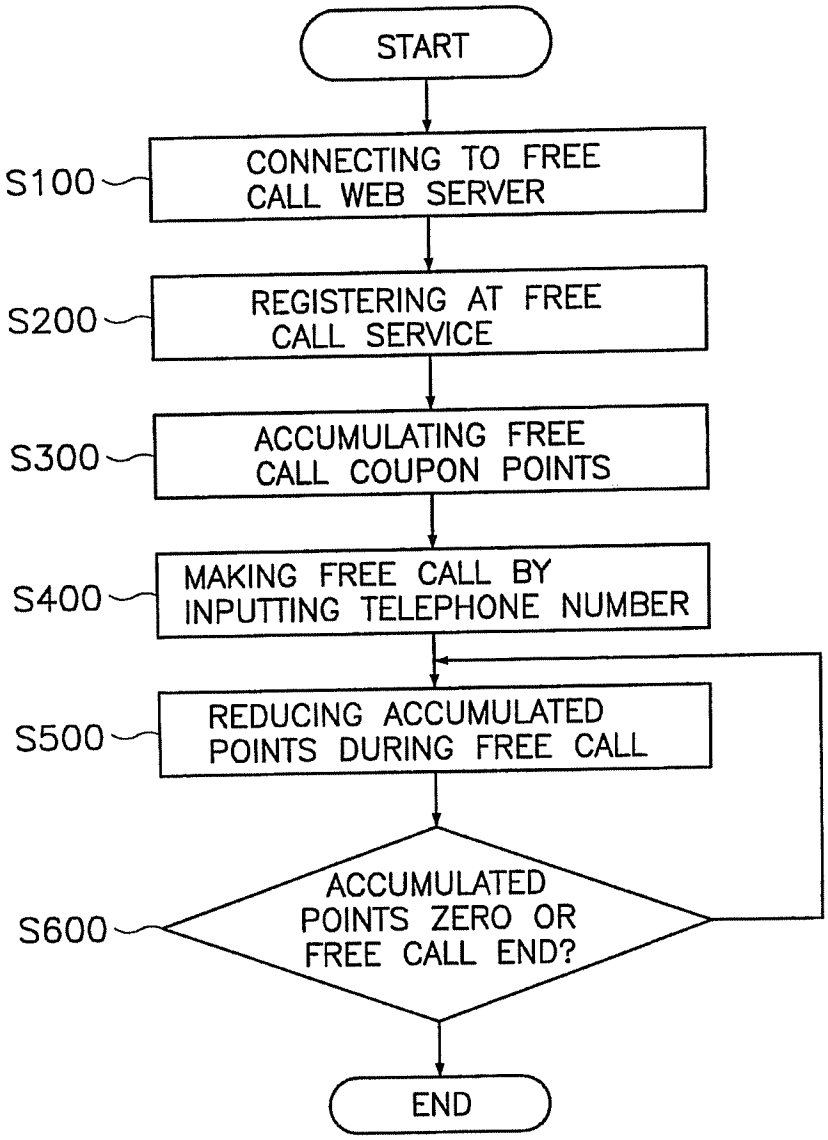

START
S100
CONNECTING TO FREE CALL WEB SERVER
S200
REGISTERING AT FREE CALL SERVICE
S300
ACCUMULATING FREE CALL COUPON POINTS
S400
MAKING FREE CALL BY INPUTTING TELEPHONE NUMBER
S500
REDUCING ACCUMULATED POINTS DURING FREE CALL
S600
ACCUMULATED POINTS ZERO OR FREE CALL END?
END

Fig.2

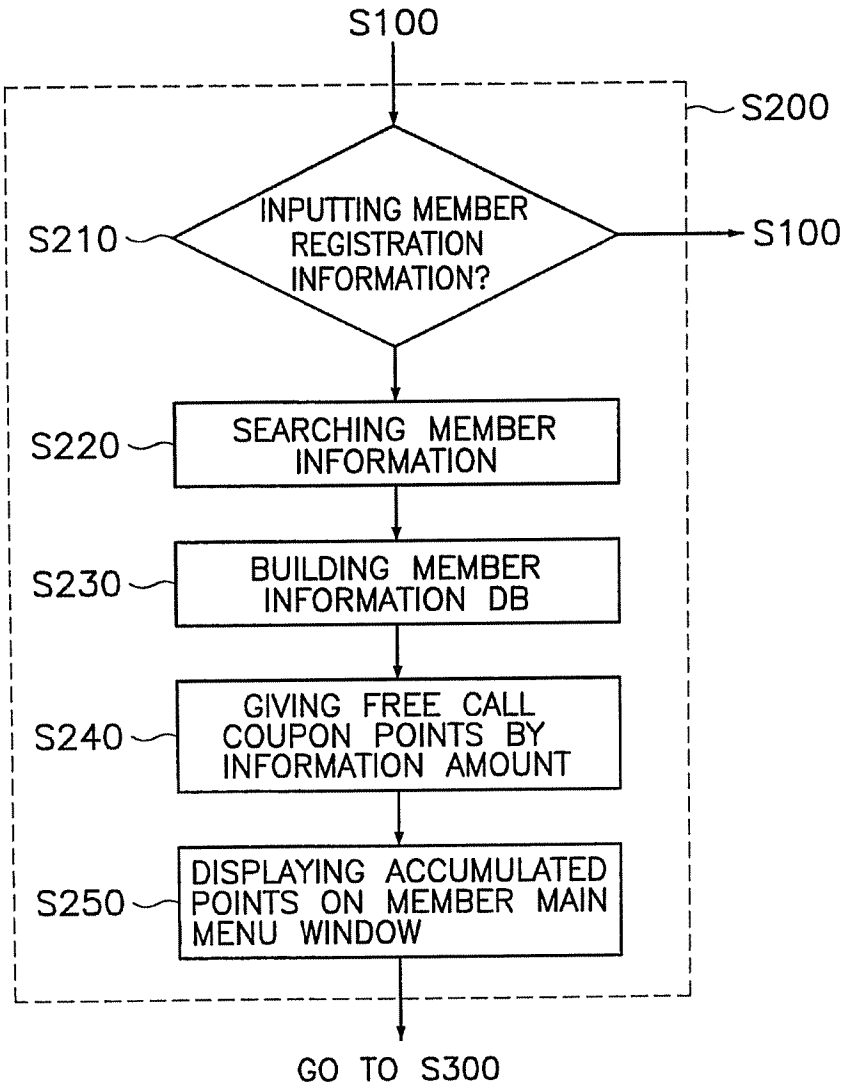

S100
S200
S210
INPUTTING MEMBER REGISTRATION INFORMATION?
S100
S220
SEARCHING MEMBER INFORMATION
S230
BUILDING MEMBER INFORMATION DB
S240
GIVING FREE CALL COUPON POINTS BY INFORMATION AMOUNT
S250
DISPLAYING ACCUMULATED POINTS ON MEMBER MAIN MENU WINDOW
GO TO S300

Fig.3

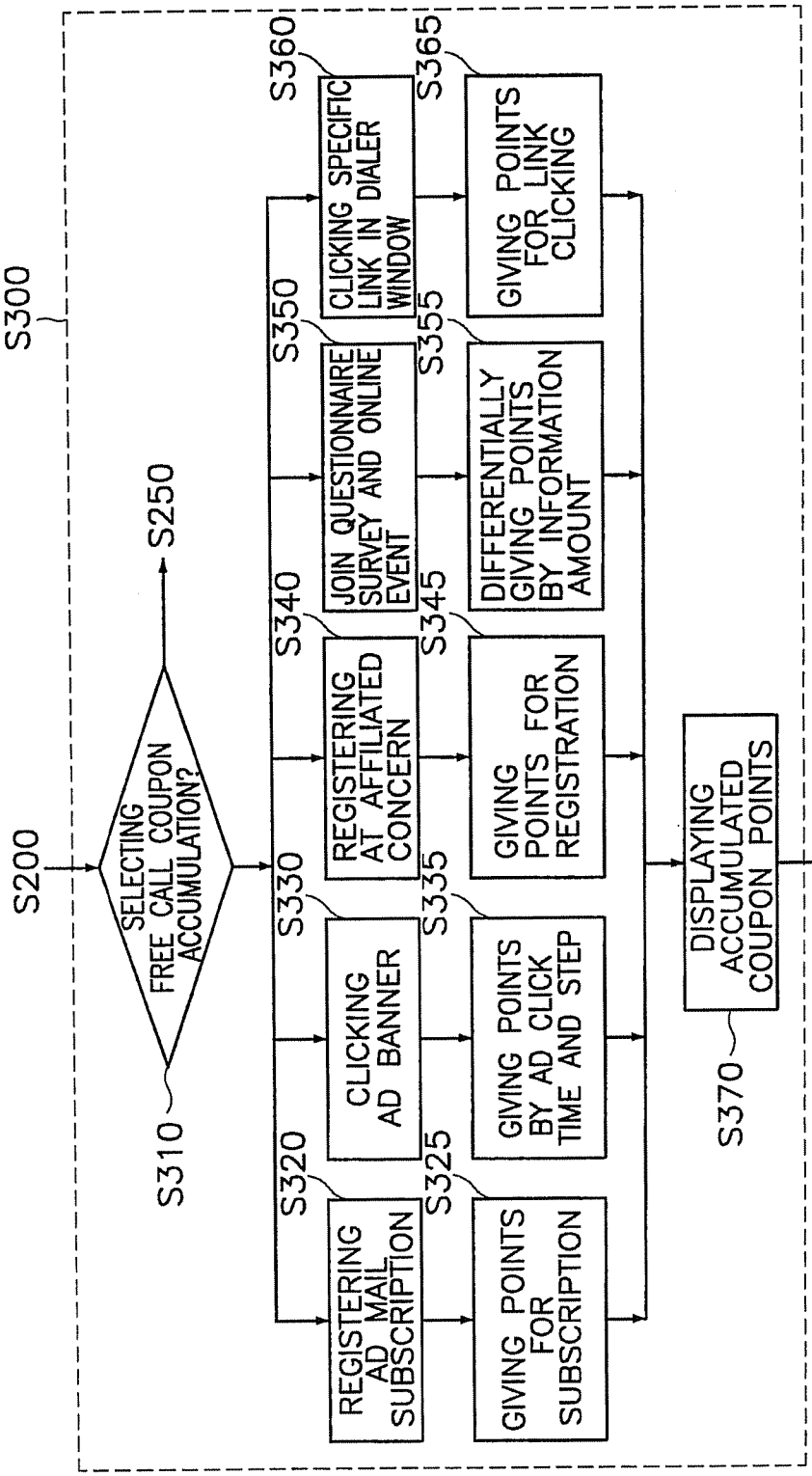

S200
S250
SELECTING FREE CALL COUPON ACCUMULATION?
S310
S300
S320
REGISTERING AD MAIL SUBSCRIPTION
S325
GIVING POINTS FOR SUBSCRIPTION
S330
CLICKING AD BANNER
S335
GIVING POINTS BY AD CLICK TIME AND STEP
S340
REGISTERING AT AFFILIATED CONCERN
S345
GIVING POINTS FOR REGISTRATION
S350
JOIN QUESTIONNAIRE SURVEY AND ONLINE EVENT
S355
DIFFERENTIALLY GIVING POINTS BY INFORMATION AMOUNT
S360
CLICKING SPECIFIC LINK IN DIALER WINDOW
S365
GIVING POINTS FOR LINK CLICKING
S370
DISPLAYING ACCUMULATED COUPON POINTS
GO TO S400

Fig.4

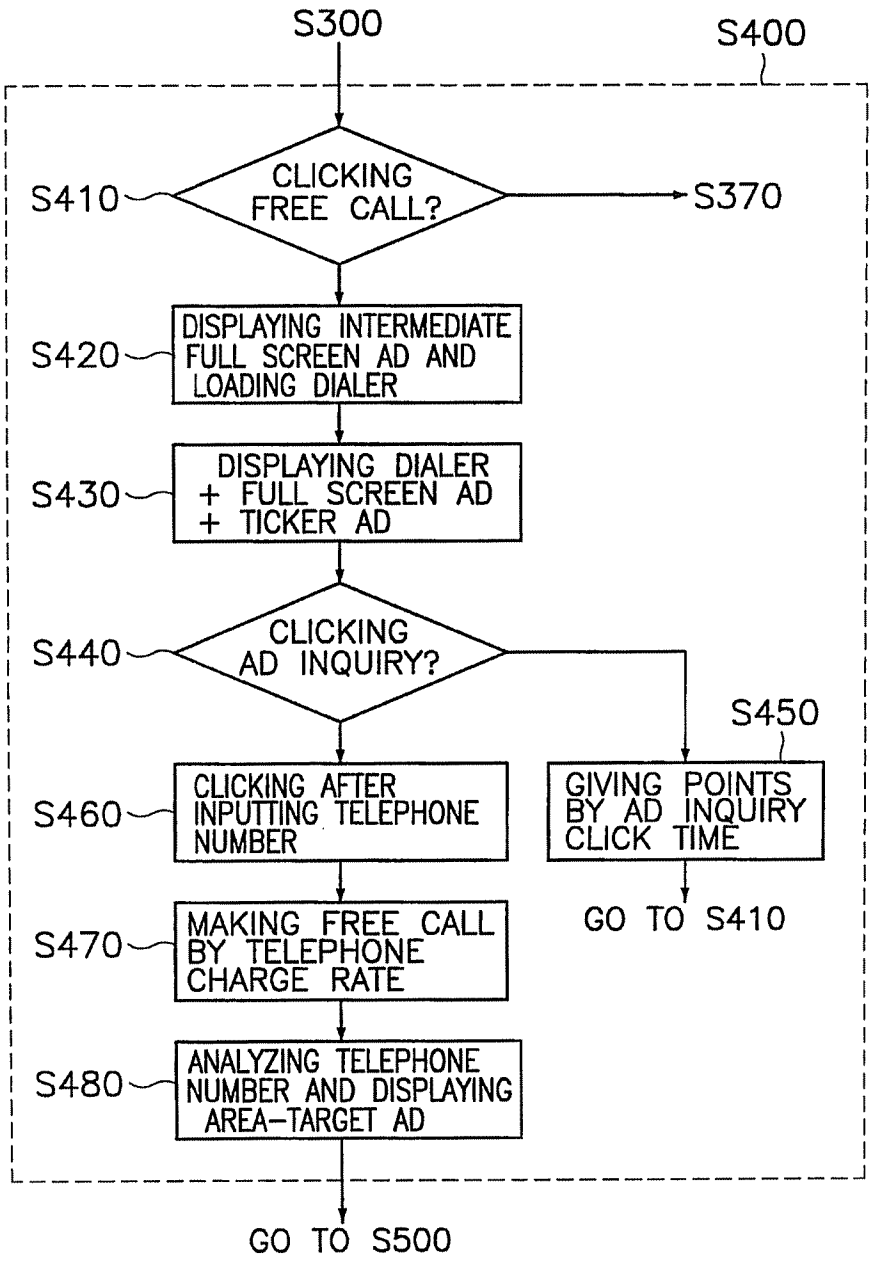

S300
S400
S410
CLICKING FREE CALL?
S370
S420
DISPLAYING INTERMEDIATE FULL SCREEN AD AND LOADING DIALER
S430
DISPLAYING DIALER + FULL SCREEN AD + TICKER AD
S440
CLICKING AD INQUIRY?
S450
S460
CLICKING AFTER INPUTTING TELEPHONE NUMBER
GIVING POINTS BY AD INQUIRY CLICK TIME
GO TO S410
S470
MAKING FREE CALL BY TELEPHONE CHARGE RATE
S480
ANALYZING TELEPHONE NUMBER AND DISPLAYING AREA-TARGET AD
GO TO S500

Fig.5

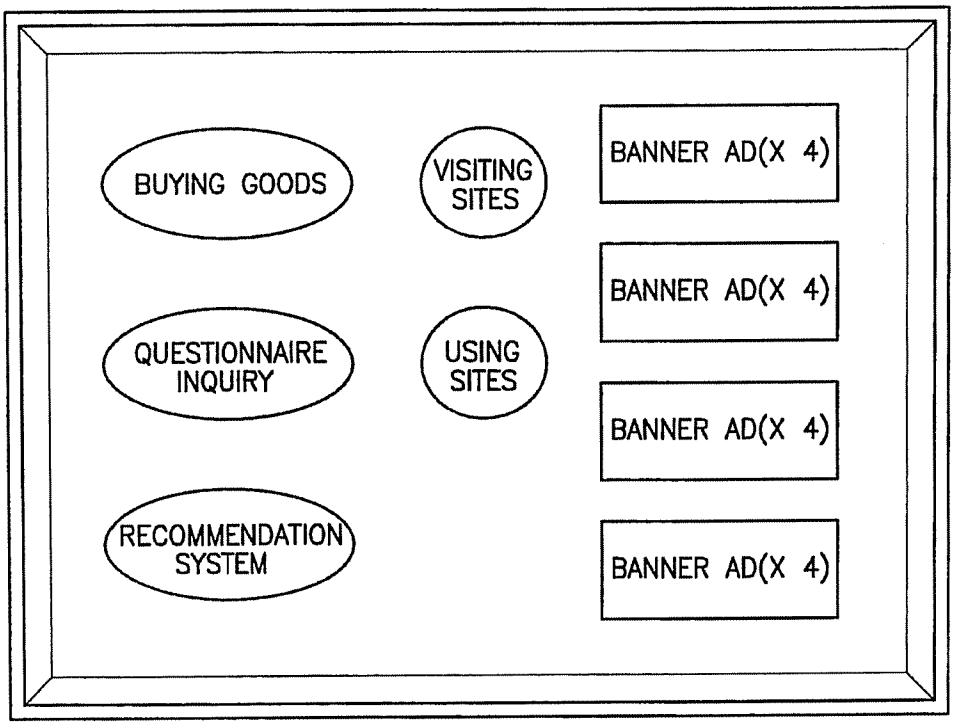

BUYING GOODS
VISITING SITES
BANNER AD(X 4)
BANNER AD(X 4)
QUESTIONNAIRE INQUIRY
USING SITES
BANNER AD(X 4)
RECOMMENDATION SYSTEM
BANNER AD(X 4)

Fig.6A

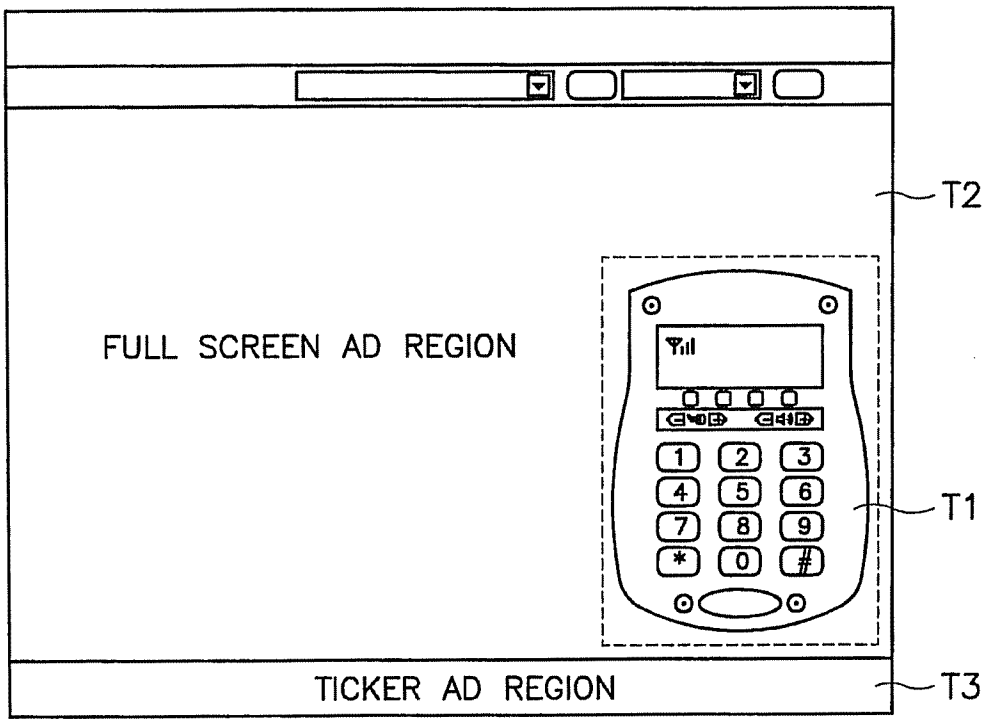


Fig.6B

INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR01/00148

A. CLASSIFICATION OF SUBJECT MATTER

IPC7 G06F 17/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimun documentation searched (classification system followed by classification symbols)

IPC7 H04M 11/00, H04L 12/28

Documentation searched other than minimun documentation to the extent that such documents are included in the fileds searched

KOREAN PATENTS AND APPLICATIONS FOR INVENTIONS SINCE 1975

Electronic data base consulted during the internationl search (name of data base and, where practicable, search trerms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 11-355339 A (MATSUSHITA ELECTRIC IND CO.LTD) DEC. 24. 1999 ABSTRACT, FIG1,8	1-13
A	JP 11-355461 A (MATSUSHITA ELECTRIC IND CO.LTD) DEC. 24. 1999 ABSTRACT, FIG1,5,8,9	1-13
A	KR 10-1999-14383 A (CHOI CHIJU) FEB. 25. 1999 ABSTRACT, FIG1, PAGE1	1-13
A	KR 10-1999-82461 A (I-LINK WORLDWIDE CORP.) NOV. 25. 1999 ABSTRACT, FIG2,3,5	1-13
A	KR10-1999-25116 A(PARK JUNHO) APRIL. 06. 1999 ABSTRACT, PAGE1, FIG1	1-13

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevence

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevence; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevence; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents,such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
07 MAY 2001 (07.05.2001)	08 MAY 2001 (08.05.2001)

Name and mailing address of the ISA/KR	Authorized officer
Korean Intellectual Property Office Government Complex-Taejon, Dunsan-dong, So-ku, Taejon Metropolitan City 302-701, Republic of Korea Facsimile No. 82-42-472-7140	SONG, Dae Jong Telephone No. 82-42-481-5992

Form PCT/ISA/210 (second sheet) (July 1998)